

In the Claims

1. (Withdrawn) A pharmaceutical composition for the treatment, prevention or diagnosis of a tumoral pathology comprising an active agent which stabilizes an actin network of a cellular cyto-skeleton.

2. (Withdrawn) The pharmaceutical composition according to claim 1, wherein the active agent is selected from the group consisting of a zyxin protein or a polypeptide fragment thereof, a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence, or an antisense nucleic acid thereof, a cell or set of cells overexpressing the zyxin gene or a functional fragment thereof, and an inhibitor of cofilin.

3. (Withdrawn) The pharmaceutical composition according to claim 1, wherein the active agent binds polymerized actin F with an affinity constant greater by at least two logs than an affinity constant with which the active agent binds non-polymerized actin G.

4. (Withdrawn) The pharmaceutical composition according to claim 3, wherein the active agent bonding actin is a cyclic peptide.

5. (Withdrawn) The pharmaceutical composition according to claim 1, wherein the active agent is a zyxin protein or a polypeptide fragment thereof.

6. (Withdrawn) The pharmaceutical composition according to claim 1, wherein the active agent is a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence.

7. (Withdrawn) The pharmaceutical composition according to claim 1, wherein the active agent is a cell or a set of cells overexpressing a zyxin gene or a functional fragment thereof.

8. (Withdrawn) The pharmaceutical composition according to claim 1, wherein the active agent is an inhibitor of cofilin.

9. (Withdrawn) The pharmaceutical composition according to claim 1, wherein the active agent is associated with a vector of intracellular transport.

10. (Withdrawn) The pharmaceutical composition according to claim 9, wherein the vector of intracellular transport is a vector of viral recombinant expression or a vector of nonviral transport.

11. (Withdrawn) The pharmaceutical composition according to claim 10, wherein the vector of nonviral intracellular transport is selected from the group consisting of a lipid, particulate, micro-particulate or nanoparticulate, polymer or polyplex vector, and cationic antibiotic.

12. (Withdrawn) The pharmaceutical composition according to claim 9, wherein the association between the active agent and the vector of intracellular transport is effected by noncovalent bonds.

13. (Withdrawn) The pharmaceutical composition according to claim 9, wherein the association between the active agent and the vector of intracellular transport is effected by covalent chemical bonds.

14. (Withdrawn) The Pharmaceutical composition according to claim 9, wherein the vector of intracellular transport is a vector of viral recombinant expression and the association between the active agent and the vector of intracellular transport is an integration of an active compound in the vector of viral expression.

15. (Withdrawn) The pharmaceutical composition according to claim 14, wherein the vector of viral recombinant expression is selected from the group consisting of an adenovirus, an adeno-virus associated virus (AAV) and a retrovirus.

16. (Withdrawn) The pharmaceutical composition according to claim 14, wherein the vector of viral recombinant expression is a lentivirus or an oncovirus.

17. (Withdrawn) The pharmaceutical composition according to claim 2, wherein the cell overexpressing the zyxin gene or a functional fragment thereof is selected from the group consisting of a stem cell, a bone marrow cell, a hemopoietic cell and a hepatocarcinoma cell.

18. (Withdrawn) The pharmaceutical composition according to claim 2, wherein the cell overexpressing the zyxin gene or a functional fragment thereof is a CD34+ cell.

19. (Withdrawn) The pharmaceutical composition according to claim 2, wherein the cell overexpressing the zyxin gene or a functional fragment thereof stems from a patient with a tumoral pathology.

Claims 20 - 42 (Cancelled)

43. (Currently amended) A method of treating or preventing hepatocarcinomas comprising administering a therapeutically effective amount of ~~the composition according to claim 1 to a patient in need thereof~~ a composition consisting essentially of an active agent which stabilizes an actin network of a cellular cytoskeleton and wherein said active agent is selected from the group consisting of:

a zyxin protein or a polypeptide fragment thereof, a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence, or an antisense nucleic acid thereof, a cell or set of cells overexpressing the zyxin gene or a functional fragment thereof,

an inhibitor of cofilin, and

a cyclic peptide.

44. (Currently amended) A method of treating or preventing mesenchymal tumors comprising administering a therapeutically effective amount of the composition according to claim [1] 43 to a patient in need thereof.

45. (Currently amended) A method of treating or preventing neuroectodermal cancer comprising administering a therapeutically effective amount of the composition according to claim [1] 43 to a patient in need thereof.

46. (Currently Amended) A method of treating or preventing Ewing's sarcoma comprising administering a therapeutically effective amount of the composition according to claim [1] 43 to a patient in need thereof.

47. (Currently Amended) A method of treating malignant hemopathies associated with chromosomal anomalies of region 7q34/q35 of a zyxin gene comprising administering a therapeutically effective amount of the composition according to claim [1] 43 to a patient in need thereof.

48. (Cancelled)

49. (Cancelled)

50. (New) A method according to claim 43, wherein said active agent is selected from the group consisting of:

a zyxin protein or a polypeptide fragment thereof, a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence, or an antisense nucleic acid thereof, a cell or set of cells overexpressing the zyxin gene or a function fragment thereof.